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## THE CONDOR

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### THE HOME LIFE OF THE WESTERN WARBLING VIREO

By HENRY J. RUST

#### WITH ELEVEN PHOTOS

ESTS of the Western Warbling Vireo (Vireosylva gilva swainsoni) placed at elevations low enough for an intimate study of the home life and for photographic purposes are not often found in this vicinity (northern Idaho), only two having come under my observation in a number of seasons afield.

The first nest was completed when found, June 22, and was discovered by the scolding note of the female, she being quite near the nest when I approached. It was suspended from the fork of a small spiraea bush five feet from the ground, back about ten feet in dense shrubbery along an old roadway on the north slope of Tubb's hill. I visited the nest as often as possible, hoping to obtain data on the life history of the bird.

Everything went along well until the three young were eight days old. On the ninth day of their existence the nest was torn from the crotch and found lying on the ground nearby; there were no signs of the young, and the parent birds were some distance away. Owing to the lateness of the season, July 15, probably no further effort toward raising a brood was made by this pair of vireos.

May 24, of last year, while passing along the old roadway about one hundred yards from where I found the nest first mentioned, I heard a female Western Warbling Vireo scolding and soon located her. A bit of plant down from a willow catkin in her bill suggested nest building, and after a short search I found the first start of the nest in a fork of a small willow. It was four and one-half feet from the ground, and consisted of several blades of dry grass woven over and under, back and forth across the crotch, the loose ends drooping, with several bits of willow down adhering.

In the afternoon of the next day the rim was finished and rounded out in shape to support the completed nest; some of the loose ends were woven in and out, with a few additional dry grass stems, bits of string and willow down, this forming a part of the body of the nest (fig. 17). Two days later, the 27th, the

nest was completed on the outside. When visited on the 30th the lining was in place, consisting of dry grass stems interwoven with ten or twelve strands of horsehair. The nest as completed measured as follows: Diameter outside,  $2\frac{1}{2}$  by 3 inches; length 3 inches; diameter inside,  $1\frac{1}{2}$  by 2 inches; depth  $1\frac{3}{4}$  inches.



Fig. 16. Old boadway on Tubb's Hill, near Coeur d'Alene, Idaho. The summer home of the Western Warbling Vireo.

On dissecting the nest after the young had flown, the following materials were noted, besides the dry glass blades and stems already mentioned: Three pieces of white string, 14, 15, and 24½ inches in length, respectively; also a number of small white threads of various lengths up to 6½ inches; 35 detacha-

ble bits of down from willow seeds, with many more woven in securely; several bits of lichen (Alectoria fremontii); small strips of ninebark (Opulaster pauciflorus); three small pieces of old discolored cotton; and, in the rim, bits of matted cow hair. There being four houses less than one hundred yards from the nesting site, the string, horsehair and cotton were no doubt obtained on or near those premises; the balance of the material could have been secured a few feet from the nest. In weaving the long piece of string, one end must have dropped down, and in picking up the loose end it had been passed under a



Fig. 17. Nest of Western Warbling Vireo, under construction for two days. The rim is finished first.

small twig below the nest, forming a long hanging loop that remained in place during the occupancy of the nest, as shown in the photos.

The bulk of the nest, if not the entire structure, was built by the female. The male remained in nearby trees, singing at regular intervals, but he was not noted helping at any time. As in the case of the former nest, several days passed after it was finished before any eggs were laid. The first egg in the second nest was noted on June 4. Visited late in the afternoon of the 7th, the nest contained four eggs, the complete set.

The young willow in which the nest was placed was growing in a small

opening about thirty feet from the edge of the old road, and was surrounded by a profusion of green shrubbery that was much to the liking of the vireos. On only two occasions did I note either of the parent birds more than forty yards away from the willow after the nest was completed, until the young had flown. I could not help but note the pretty setting for such an interesting bit of home life. The ground was carpeted with a thick growth of wild sweet pea (Lathyrus pauciflorus) which was in full bloom and scenting the air with a sweet odor. One side of the opening was enclosed with buckbrush (Ceanothus sanguineus) and ninebark in bloom; beyond there were several large yellow pines and Douglas fir trees; on the other sides were service berry bushes, wil-

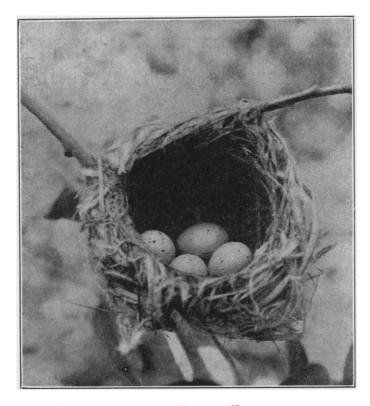


Fig. 18. NEST OF WESTERN WARBLING VIREO CONTAINING THE FULL SET OF EGGS.

lows, and ocean spray (Schizonotus discolor) which extended to a large grove of pine and fir trees in the near distance. In and out through the surroundings were bushes of the large flowering wild rose in full bloom, adding a touch of color to the masses of green and white.

In order to view the nest it was necessary to reach the small opening. If the female was incubating she quickly became aware of my presence, and at a distance of about five feet, would flit from the nest to a nearby bush, to begin the usual vireo scold. The first few notes never failed to enlist the sympathy of any feathered neighbors who happened to be near, but after a brief scrutiny they would retire and leave the female vireo to her fate. She would return to the nest as soon as I withdrew from sight.

If my visit happened in the morning, and the male was incubating, I could almost touch the nest before he would leave. Then, alighting on a small dead fir tree nine feet from the nest, he would burst into song. This small tree was his singing tree, and from this tree he nearly always approached the nest in the same manner, first singing from the tree, then moving to a perch on a shrub near and above the willow, and then to the twig supporting the nest. During incubation he would sing once near the nest, then proceed to cover the eggs, and as soon as he was comfortably settled down he would sing regularly at



Fig. 19. MALE WESTERN WARBLING VIREO ON THE NEST, SINGING WHILE PERFORMING THE DUTY OF INCUBATION.

short intervals. Not being able to secure any photos of the female without constructing a blind, I contented myself with making pictures of the male, a willing subject.

At the end of twelve days the four white eggs with their markings of black specks gave place to four naked, dark yellow-colored young; when first seen all were huddled up in a pile in a corner of the nest. I was able to observe only the male parent feeding at close range, and I was surprised to note the care he took to feed the helpless young before they were strong enough to raise their heads for food.

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Fig. 21. Male Vireo examining the nest. One young bird had Just died and had not yet been removed.



Fig. 20. Male Vireo in an outburst of song on the edge of the nest after the eggs had hatched. The tongue is not visible though the bill is held wide open.

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Fig. 23. Male Vireo inspecting his family; in apparent concern over the one weakling.



FIG. 22. MALE VIREO FEEDING THE YOUNG.

The young gained in size and strength rapidly. After they were several days old the male would sing from the tree as before, then fly direct to the nest and perching on the brim, would sing as if he would burst his throat. On one occasion a male Cassin Purple Finch seemed to share his joy, and, alighting on the singing tree, joined in and sang his best. The same incident occurred again when the young were a week old, but this time the male vireo seemed to resent the intrusion and drove the finch away in a hurry, chasing him some distance.

When the young were five days old, I noticed the male vireo looking into the nest after each feeding, and on investigating found one of the young dead in the bottom of the nest. I at once proceeded to remove the remains, and in so doing became aware of the advantage of horsehair woven in the nest lining.



Fig. 24. Young Vireos, five days old.

The young bird's claws were closed tightly over several strands, and the interior of the structure was considerably torn up before I managed to remove the dead bird. To all appearances the young bird had been dead but a short time, but it was infested with a number of large maggots and was in such a condition that I made no effort to save it for later examination. I kept close watch of the young from then on, and two days later another showed signs of weakness. I failed to find any signs of maggot infestation, and the weakling began to improve slowly but was much smaller than the two others.

The nest was kept very clean, both parents assisting in the task. At the age of nine days the eyes of the two stronger young were open, but the weakling was several days later in receiving its sight. In securing food for the young the female gathered much larger insects than the male, often coming in

with a good sized caterpillar dangling from her bill. When I was near she would fly back and forth six or eight feet from the nest and scold until the food was either lost or she ate it, I never could tell which. She never fed the young while I was near.

The male would often dart from his perch in the dead fir tree in the manner of a flycatcher, and snap his mandibles a number of times as if trying to catch some passing insect, but I failed to note any success. Again he would occasionally hover under a green leaf in a manner similar to a kinglet, but when he really thought it was feeding time it was a small matter for him to obtain a mouthful by searching nearby twigs or leaves. In securing large-



Fig. 25. THE NOON-DAY REST.

sized insects he would strike his bill against his perch, soon killing them, often eating them himself and securing smaller ones for the young. The male would fly from a shrub near the willow direct to the nest and feed the young regularly when I was standing less than four feet away.

At the age of twelve days the young were well feathered and able to perch on the edge of the nest with a little assistance on my part. The parents became very much excited when they saw two of the nestlings out on the edge of the nest and uttered similar chirping notes trying to coax them away. On the

fifth day of July they had their pictures taken for the last time; on the sixth the nest was deserted. Two days later I found the parent birds in some dense brush about seventy-five yards from the nest, but could not locate any of the



Fig. 26. Ready to leave the nest. Young Western Warbling Vireos fifteen days old.

young. After a severe scolding from the parents I retired and left them to their ways in peace.

Coeur d'Alene, Idaho, February 10, 1920.